THE TECHNOLOGY REVIEW

Edited at the Massachusetts Institute of Technology

Cambridge 39, Massachusetts

INDEX

to

VOLUME LII

From November, 1949, through July, 1950

THE TECHNOLOGY REVIEW

INDEX TO VOLUME 52: November, 1949, through July, 1950

A number of references are entered under general headings. These include: Book Reviews, Illustrations, Letters to the Editor, Photographs (except photographs of people), and Visiting Committee reports.

Articles are indexed by name of author and content rather than by title.

Pages of The Technology Review are numbered serially throughout the volume. Pages included in each of the nine issues of Volume 52 are:

November	1–68
December	69–128
January	129–184
February	185–232
March	233–288
April	289–344
May	345–412
June	413–468
July	469–556

A

Abdesselam, Robert, high-speed photo of, 87
Abkowitz, Martin A., becomes assistant professor, 102
Academic freedom, M.I.T.'s policy on, 35
Acoustics: combines with architecture to study auditory qualities, 146; used in study of adhesives, 303; Laboratory at M.I.T. conducts ultrasonics research, 426
Adhesives, on steel rods studied, 303
Adler, Richard B., becomes assistant professor, 382
Aeronautical Engineering, Department of, to hold forum on Alumni Day, 444
Agriculture, soil fertility provides nutrition, 432
Airplanes: maintenance and repair systems for, 85; seadromes for, 207; flight simulator for, 212; laminated materials in construction of, 254; development of small, 263
Albrecht, William A., on soil fertility to provide nutrition, 432
Allen, C. Frank, participated in founding of M.I.T. Alumni Association, 249
Allendoerfer, Carl B., appointed visiting professor, 102
Allis, William P.: becomes professor, 382; photo, 382
Aluminum, supply of, appears plentiful, 159
Alumni Association of M.I.T.: moves to Bldg. One, 104; creates new post, asst. treasurer, 160; midwinter meeting of, 160, 262, 263; changes by-laws, 160; founding of, 247; selects new officers, 261, 444; welcomes Class of 1950, 515
Alumni Council meetings: 104, 160, 262, 318, 379, 445
Alumni Day: date of, 106; plans for, 262, 378, 444; committee personnel named, 262; symposium papers of, 506 *ff.*; report on, 514; banquet, 520
Alumni Fund: reports on, 101, 160, 379; moves to Bldg. One, 104
Alumni, M.I.T., Development Program plans for, 104
Ambrose, Warren, becomes associate professor, 382
American Cancer Society, sponsors research at M.I.T., 384
American Institute of Graphic Arts, presents award to M.I.T. School of Architecture, 218
American Physical Society, M.I.T. personnel present papers at meeting of, 268
Americans, should clarify values as, 503
Anable, Anthony, proposes award for professional achievement, 318
Anderson, Lawrence B., supervises architectural acoustics model study, 146
Anderson, Philip B., becomes assistant professor, 102
Animal life, in M.I.T.'s Great Court, 443
Animals, single-celled, use of, 425
Anniversaries: survey of, omitted, 141; of inventions and events since 1900, 156
Appel, Parke D., on midwinter meeting, 262, 263, 379
Archer, James E.: becomes instructor, 384; and Harrison develop commensurator, 426
Architecture, and physics combine to predict acoustics, 146
Architecture, School of: receives award for excellence in printing, 218; *see also* Visiting Committee reports
Armour and Company, co-operates with M.I.T. on insulin research, 108
Armstrong, Edward R., proposed seadrome, 208
Army Signal Corps, M.I.T. conducts research on microwave radar for, 197
Arnold, John E., becomes associate professor, 382
Astronomy: three-step orbital rocket, 93; telescope at Univ. of Calif., 96
Athletic Department, established at M.I.T., 315
Athletics, M.I.T.: facilities for, extended, 98; Tech's-a-Poppin week end, 171; account of, 315; short report on, 521
Atom bomb: not means of maintaining peace, 205; use of, in future wars, 250
Atomic energy: for rocket delivery, 226; to establish one world, 230; effect of restrictions on, 429
Atomic Energy Commission: sponsors radiation defense courses, 390; sponsors research on mesons, 495
Atoms, in crystals, photographed, 495
Automotive engineering, new developments in, 164
Autopilot, in flight simulator, 212
Aviation: safety systems for, 85; Montgomery's experiments in, 92; supersonic wind tunnel, 161; development of microwave radar, 197; proposed seadromes, 208; for national defense, 312

B

Baccalaureate, address by Dr. Compton, 497
Baird Associates, and Continental Can Co. support commensurator development, 426
Bakalar, Israel D., research by, on self-diffusion in iron, 496
Baker, Everett M., speaks at Honorary Secretaries' meeting, 518
Baldwin, Frank M., becomes director, Housing and Dining Facilities, 98
Ballantine, Duncan S., becomes associate professor, 382
Barker, Joseph W., dedicates Jackson Room, 522
Barnard, Chester I.: on relevancy of skill, knowledge, and judgment to successful life, 500; informal photo, 514
Barr, Dr. Joseph, chairman, Committee on Brace Research, 496
Barrett, Francis A., elected to Alumni Fund Board, 318
Bastian, John L., becomes assistant professor, 382
Batterman, Charles, photo, 300
Bauer, William C., becomes assistant professor, 102
Bavelas, Alexander, becomes associate professor, 102
Beadle, Walter J., reports on Development Fund, 446
Beattie, James A., research by, on gas densities and properties, 144
Beet sugar, reclaiming process for waste from, 141
Bemis, Alan C., research by, on microwave radar to study weather, 197
Berg, Warren, on M.I.T. athletics, 315
Biology, uses of single-celled animals *versus* single-celled plants in research, 425
Biology, Department of: research by, on iron in body, 143; research by, on edestin crystals, 202; to be in Dorrance Laboratory, 260, 264; to hold forum on Alumni Day, 444
Birds, in M.I.T.'s Great Court, 443
Bishop, Robert L., becomes associate professor, 382
Blackburn, John F., aided flight simulator development, 213
Blake, Charles H., on plant and animal life in M.I.T.'s Great Court, 442
Blodgett, George W., early organizer of M.I.T. Alumni Association, 248
Boats, catamaran as basis for modern, 200
Bodurtha, Frank T., becomes instructor, 384
Boehne, Eugene W.: becomes professor, 382; photo, 382
Bolt, Richard H., supervises model study in architectural acoustics, 146
Book publishing, problems of, 552
Book Reviews: *Atomic Energy and the Life Sciences* [by U. S. Atomic Energy Commission], 245; *American Men of Science* [edited by Jaques Cattell], 359
Boston, motor route for, 319
Boston Stein Club, equipped M.I.T. Map Room, 366
Bouscaren, Louis H., reports on Development Fund, 446
Boyd, Julian P., spoke at Hayden Library dedication, 425
Brady, John F., becomes instructor, 384
Bramhall, Ervin H., on aircraft for national defense, 312
British Empire, least vulnerable war target, 252
Bronk, Detlev W., delivers Little Memorial Lecture, 164
Brown, Sanborn C., research by, on voltage breakdown at high frequencies, 302
Bruce, Burton B., becomes associate professor, 102
Brush, Charles F., lighting system of, 371
Buerger, Martin J., research by, on photographing atoms in crystals, 495
Buffington, Francis S., research by, on self-diffusion in iron, 496
Bugbee, Harold, Barrett replaces on Alumni Fund Board, 318
Building construction, use of laminated materials in, 253
Bullard, Frederic F., composed music of "A Stein Song," 246
Bunker, John W. M.: on M.I.T. Graduate School, 26; state representative to study radiation defense, 390; honorary member, Alumni Association, 445, 520; informal photo, 518

Burchard, John E.: and coauthor Tate on Hayden Library, 361; presided at Hayden Library dedication, 425; photo, 361
Bureau of Labor Statistics, on strikes, 258
Burwell, John T., Jr., research by, on cylinder engines, 302
Buschenfeldt, Karl, member, Committee on Brace Research, 496
Bush, Vannevar: life member, Graphic Arts Research Foundation, 19; recommends democratic attributes to defeat dictatorship, 147; photo, 19
Business and Engineering Administration, Department of: moved to Hayden Library, 104; Sloan Fellows to study in, 216; to hold forum on Alumni Day, 444
Buttner, Frederick H., becomes instructor, 102

C

Caldwell, Samuel H.: consultant, photocomposition process, 18; photo, 19
Calif. Institute of Technology, collaborates on experiments on liquid-fuel rockets, 20
California, University of, owns telescope at Lick Observatory, 96
Camp Wonderland, Freshman Class orientation program at, 36
Campbell, Donald P., speaks before M.I.T. Alumni Council, 445
Campbell Soup Company, grant from, to M.I.T., 260, 263
Cancer: diagnosis, 245; treatment, 384
Carson, Howard A., third president, M.I.T. Alumni Association, 284
Catamarans, structure of, compared to modern seacraft, 200
Cells, single, in plants or animals, 425
Central Library, M.I.T., description of, 367
Ceramics, applications of science to, 307
Ceramics Laboratory, M.I.T., crucibles made in, 311
Chaddock, Jack B., becomes instructor, 384
Chadwick, Guy: becomes professor, 101; photo, 102
Chalmers, Paul M., speaks before M.I.T. Alumni Council, 263
Champ, Norman B., student chairman, Open House, 160
Chanute, Octave, records Montgomery's gliding experiments, 92
Chemical Engineering, Department of, to hold forum on Alumni Day, 444
Chemistry: chromatography, 21; applications of, in utilizing inexhaustible raw materials, 22; gas densities and properties, 144; synthesis of peptides, 198
Chemistry, Department of: research by, on synthesis of peptides, 198; to hold forum on Alumni Day, 444
Chlorine, use of, in beet-sugar waste, 141
Chromatography, description of, 21
Chrysler Corporation, supports M.I.T. research on cylinder engines, 302
Cities Service Res. and Devel. Co., grant from, to M.I.T., 211
Civil Aeronautics Administration, requirements of, for airplanes, 85
Civil and Sanitary Engineering, Department of: research by, on hydroelectric systems, 199; to hold forum on Alumni Day, 444; research by, on leg braces, 496
Class Day, report on, 514
Class of 1900, presents gift to M.I.T., 520
Class of 1925: presents gift to M.I.T., 520; presents gift to Development Fund, 520
Class of 1948 award, to John H. MacMillan, 516
Class of 1950: baccalaureate address to, 497; commencement address to, 500; valedictory address to, 503; Senior Week activities of, 514
Class of 1953, attends orientation week-end program, 35
Class reunions, for 1950, listed, 318, 445
Clay, use of, in ceramics, 307
Coal: conversion of, into gasoline, 87; U.S. production of, 156
Cohen, Morris, research by, on self-diffusion in iron, 496
Cohen, Paul: on accomplishments in science and technology since 1900, 156; on preventive methods of ship-rolling, 439
Colleges, duties of, during armed truce, 431
Commencement: address of Chester I. Barnard, 500; Dr. Killian's valedictory address, 503; report on, 516
Commensurator, developed at M.I.T. by Harrison and Archer, 426
Communication, new mediums of, complementary to printed matter, 510
Communism, M.I.T.'s policy on, 35
Compton, Karl T.: resigns as chairman, Res. and Devel. Board, 83; receives Nelson Award, 164; speaks at midwinter meeting, Boston Alumni, 263; speaks before M.I.T. Alumni Council, 318; on ethical behavior as foundation for successful life, 497; returns to M.I.T. full-time, 520; informal photos, 493, 514, 518, 519, 520
Computers, use of, in flight simulator, 213
Concrete, uses of vermiculite in, 219
Conservation: of human-growth factors, 159; of natural resources, 334
Conte di Savoia, stabilization equipment of, 454
Continental Can Co., and Baird Associates support commensurator development, 426
Convictions, need of stressing American, 505
Convocation, Mid-Century, observations on, 33
Copper, duration of reserve of, 158
Corning Glass Works, cast glass for Palomar telescope, 96
Cosmic rays, data on, to be obtained from instruments on orbital rocket, 93
Cousins, Norman, speaks at Hayden Library dedication, 425
Cross, Charles R.: first secretary, M.I.T. Alumni Association, 248; photo, 248
Crystals, atoms in, photographed, 495
Curtis, Russell H., participated in founding M.I.T. Alumni Association, 249

D

Dahl, Norman C., becomes assistant professor, 102
Dalton, Marshall B.: announces grant from Campbell Soup Co., 260, 263; announces gift from Rockefeller, 446; reports on Development Fund, 520; Dr. Killian pays tribute to, 526; informal photos, 493, 521
David, Edward E., Jr., becomes instructor, 384
Davis, Harry F., 2d, becomes instructor, 384
Davy, Sir Humphrey, Faraday's colleague, 23
Decibels, definition of, 84
Defense: use of aircraft in national, 312; courses in radiation sponsored, 390
de Florez, Luis: Alumni Day symposium speaker, 444, 519; on application of technology to graphic arts industry, 512; informal photo, 514
Democracy: attributes of security to maintain a, 148; civilization advances by, 374; world, impractical at present, 437; knowledge of, is strong weapon, 503
Denison, Orville B., presides at midwinter meeting of Boston Alumni, 263
Dennen, William H., becomes instructor, 102
Dennett, Raymond, becomes instructor, 102
Denny-Brown, fin stabilizers to prevent ship-roll, 440
Desmond, Thomas C.: master of ceremonies, Alumni Day banquet, 520; informal photos, 493, 518, 521
Development Program, M.I.T.: industrial grants-in-aid assist, 211; grant from Campbell Soup Co., 260; financial status of, 263, 318; Greater Boston phase of, 322; Dr. Killian reports on, 526; *see also* Comm. on Financing Development
Dever, Paul A., appoints Bunker state representative for radiation defense, 390
Dewey Library, M.I.T., description of, 366
Dictatorships, democracies can outpace, 148
Diesel locomotives, lead railroad motive power, 149
Dietz, Albert G. H.: on progress in laminates, 253; and Meissner direct research on adhesives, 303; becomes professor, 382; photo, 382
Diffuser, supersonic, developed at M.I.T., 303
Donovan, James, Alumni Day luncheon chairman, 263, 379
Dorrance, John Thompson, Laboratory, plans for, 260, 264, 526
Douglas Aircraft Company, collaborates on experiments on liquid-fuel rockets, 20
Dramashop, M.I.T., presents play, *R.U.R.*, 388
Draper, Charles S., and Li developed new engine indicator, 164
DuBridge, Lee A., photo, 21
duPont de Nemours and Co., E. I., products of, demonstrated, 263
Dynamic Analysis and Control Laboratory, M.I.T., flight simulator built in, 212
Dynamo, built by Weston, 370

E

Economics and Social Science, Department of: moved to Hayden Library, 104; Sloan Fellows to study in, 216
Edestin crystals, electron microscope identifies, 202
Edgerton, Harold E.: consultant, photocomposition process, 18; speaks before M.I.T. Alumni Council, 161
Edison, Thomas A., Weston competed with, 371
Education: hazards of specialized, 28; fusion of science and humanities will broaden, 33; progress in, since 1900, 174; processes and problems of, 304; university forum to solve problems of, 374; admixture of many ingredients, 538
Educational Survey, Committee on: to report to M.I.T. Faculty, 34; findings of, 380; Dr. Killian reports on, 521
Edwards, Charles M., aided development of flight simulator, 213
Electric illumination, Weston's contributions to, 371
Electric lamp, relation of, to rayon industry, 156
Electrical Engineering, Department of, to hold forum on Alumni Day, 444
Electrical measurements, Weston invented instruments for, 372
Electricity, research on voltage breakdown at high frequencies, 302
Electron microscope, used in visualizing protein edestin, 202
Electron tubes, research on, 22
Electroplating, Weston's experiments in, 370
Electrostatic generator: for cancer treatment, 384; 12-million volt, 526
Engineering, accomplishments in, 156
Engineering Foundation, sponsors research on self-diffusion in iron, 496
Engines: research on performance of, 142; new indicator for gasoline, 164; research on wear of cylinders in, 302
English and History Library, M.I.T., description of, 365
Enrollment, M.I.T.: report on, 99; sons of Alumni in Freshman Class, 100; of foreign students, 450

Explosives, description and applications of hollow charge [Munroe effect], 52

F

Faculty Comm. on Advanced Degrees and Fellowships, administers affairs of graduate students, 26
Faculty, M.I.T.: changes and promotions, 101, 211, 382; retirements, 319; achievements, 521
Family, improvement of, 30
Faraday, Michael: biographical sketch of, 23; photo, 23
Farrin, James M., Jr.: becomes professor, 102; photo, 102
Fathers of Freshmen, who are Alumni, 100
Fatigue of metals, new testing machine for research on, 301
Fawcett, Don W., and Vallee develop technique for cancer diagnosis, 245
Federation, of democracies, 438
Felbeck, David K., becomes instructor, 384
Ferguson, Hugh S.: general chairman, Alumni Day, 106, 379; reports on Alumni Day, 263; informal photo, 518
Finances, M.I.T., report on, 101
Financing Development, Committee on: organizational work completed, 34; Alumni participation in, 104; Campbell Soup Co. grant to, 263; Rockefeller gift to, 446; report on, 520; *see also* Development Program
Fire prevention, use of cement-vermiculite concrete in, 219
Fitzpatrick, John W., becomes associate professor, 102
Flight simulator, description and uses of, 212
Floe, Carl F.: becomes professor, 382; photo, 382
Food: raw materials chemically transformed, as source of, 22; packaging materials for, 86; beet-sugar waste utilized, 141; affects iron assimilation, 143; changes in production of, 306; indigenous, provides nutrition, 428; crops, nutritive, depend on soil fertility, 432; food habits, changes in, 157
Food Technology, Department of: research by, on packaging materials, 86; collaborates on research on iron assimilation, 143; to be in Dorrance Laboratory, 260, 264
Ford, Horace S.: Treasurer's report summarized, 101; retires, 319; honorary member, Alumni Council, 445; speaks at Lowell Institute graduation, 446; photos, 319, 519
Foreign Student Summer Project, promotes international relations, 450
Fox, Kenneth R., announces co-operative plans for Lowell Textile and M.I.T., 36
Frank, Victor S., research by, on synthesis of peptides, 198
Freeman, Harold A.: becomes professor, 382; photo, 382
Freshman Class, holds orientation week-end program, 36
Freshman statistics, sons of Alumni at M.I.T., 99
Fuel, conversion of coal into liquid, 87
Fuller, Dean M., obituary, 164
Furnas, C. C.: on processes and problems of education, 304; suggests university forum to solve problems of education, 373

G

Gale, Walter H.: director, M.I.T. Summer Session, 35, 36; announces summer courses, 381; speaks before M.I.T. Alumni Council, 445
Garth, William W., Jr.: his company developed photocomposition process, 18; member, Alumni Association Executive Committee, 262, 444; Alumni Day symposium chairman, 263, 379, 444; informal photo, 514
Gas: measurements of densities and properties of, 143; research on alternating current breakdown of, 302
Gas, interplanetary, data on, obtainable from orbital rocket instruments, 93
Gas Turbine Laboratory, M.I.T., develops wind tunnel diffuser, 303
Gasoline, conversion of soft coal into, 87
Geiger, Ivan J., presents Class of 1948 award, 516
Geology, Department of, new officers for, 381
Germans, rockets used by, 203
Giedion, Sigfried: becomes visiting professor; biographical sketch of, 214
Gliding, Montgomery's experiments in, 92
Goetze, Dieter, research by, on ultrasonic generators, 427
Goodwin, Harry M.: first dean, M.I.T. Graduate School, 26; obituary, 37; resolutions on, adopted, 106; awards, in memory of, 523; photo, 37
Gossip, forces of, control society, 88
Gottlieb, Joseph S., gives Beaver oration, 516
Graduate School, M.I.T.: expansion and consolidation of, 26; Comm. on, determines policies of, 26
Graphic arts: history and development of, 506; application of technology to, 512
Graphic Arts Research Foundation, photocomposition process is first project of, 19
Great Court, M.I.T., plant and animal life in, 442
Green, Edward H. R., estate of, for recreation and study by M.I.T. personnel, 35
Green, Lonsdale, on "A Stein Song," 246
Grimminger, George, calculates effect of meteorites on space ship, 19
Grossman, Nicholas, research by, on metals, 301
Gyroscope, for ship-roll stabilization, 441

H

Habakkuk, proposed seadrome, 210
Hall, Albert C.: director, laboratory which developed flight simulator, 212; photo, 212
Hall, Cecil E., research by, on protein edestin, 202
Hamilton, Leicester F., member, Summer Program for Science Teachers Committee, 264
Hancock, John M., becomes special term member, M.I.T. Corporation, 99
Hansen, Robert J.: becomes associate professor, 382; member, Committee on Brace Research, 496
Hare, Dr. Hugh F., reports on cancer patients treated at M.I.T., 384
Harleman, Donald R. F., becomes assistant professor, 382
Harmonics, in machinery, detection of, by wave correlator, 84
Harris, Lawrence A., becomes instructor, 384
Harris, Robert S.: research by, on iron assimilation, 143; research by, on indigenous foods, 428
Harrison, George R.: accepts Nelson Award for Dr. Compton, 164; and Archer develop commensurator, 426
Hartley, E. Neal, becomes assistant professor, 382
Hayden, J. Willard, participant, Hayden Library dedication, 425
Hayden, Charles, Memorial Library: humanities departments move into, 35; nears completion, 261; description, aims, and provisions of, 361; dedicated, 425; Alumni Day symposium to be held in, 444
Heaviside, Oliver, biographical sketch on, 360
Heiskell, Andrew: Alumni Day symposium speaker, 444, 519; on new mediums of communication, 510; informal photos, 514, 518
Henri, Victor P., studies mesons, 426
Herreshoff, Nathanael G., studied design of catamaran, 201
Hicks, Talmage Y., becomes instructor, 384
High Voltage Engineering Corp., developed electrostatic generator for cancer, 384
Higonnet, René A., and Moyroud, inventors, photocomposition process, 18
Hildebrand, Francis B., becomes associate professor, 382
Hitchcock, Henry-Russell, prepares brochure text which wins award from American Institute of Graphic Arts, 218
Hokanson, Wolcott A., Alumni Day registration chairman, 263, 379
Holley, Myle J., Jr., becomes associate professor, 382
Hollow-charge principle, description and applications of [Munroe effect], 52
Holmes, Addison F., obituary, 100
Homerberg, Victor O.: retires from M.I.T., 319; photo, 319
Honorary Secretaries, annual meeting of, 517
Hottel, Hoyt C., received Walker Award, 216
Housing: laminated materials in construction of, 255; Riverside Apartment Hotel provides, for M.I.T. students, 324
Houston, Holland H., becomes representative, National Nominating Committee, 262, 444
Hovey, Richard, wrote words of "A Stein Song," 246
Hovgaard, William, obituary, 261
Hudson, Ralph G.: retires from M.I.T., 319; photo, 319
Hughes, Walter L., and Vallee collaborated in research on cancer cells, 245
Humanities: fusion of, with science, 33; M.I.T. departments of, move to Hayden Library, 35; Hayden Library is laboratory for, 364; renaissance of, through engineering schools, 448
Hume, David N., becomes associate professor, 382
Hunsaker, Jerome C., on National Advisory Comm. for Aeronautics, 214
Hunter, Dard, reappointed head, Dard Hunter Paper Museum, 211
Hunter, Dard, Paper Museum: recommended that Dept. of Naval Architecture and Marine Eng. have space occupied by, 46; to move to Hayden Library, 211; description of, 367
Hurley, Patrick M., becomes executive officer, Department of Geology, 381
Hydraulics Laboratory: to be constructed; to include towing tank, 44; *see also* Hydrodynamics Laboratory and Towing Tank
Hydrodyanamics Laboratory and Towing Tank, at M.I.T. practically completed, 526
Hydroelectric systems, electrical computers used in study of, 199
Hydrogen bomb, development of, 429

I

Illustrations: *Cartoons:* cows, 314; distribution of funds, 148; duck flying, 313; fisherman, 314; Indian on rock, 313; Stalin and Molotov, 148. *Diagrams:* Atlantic Ocean with seadromes, 209; book-publishing process, 513; Hayden Library floor plan, 362; hydroelectric system, 199; M.I.T. athletic participation, 317; nitrogen's effect, 436; photocomposition process, 18; rocket trajectories, 94; seadromes,

207, 208, 210. *Drawings:* bird, 443; flower, 443; "Gloucester Fisherman," 244; M.I.T. financial operations, 101; ultrasonic generator, 427. *Engravings:* astronomical instruments at Nuremberg, 96; telescope at Royal Observatory, 97. *Graphs:* iron in blood stream, 143; volumetric efficiency of single-cylinder engines, 142. *Line Cuts:* photocomposition, 19. *Maps:* M.I.T. and environs, 442. *Paintings:* attendants at Faraday lecture, 25.
Incentives, nobler, provide satisfactions, 497
Individualism, advances living standards, 336
Industrial Liaison Office: established at M.I.T., 34; in Building One, 104
Industry, representatives from, to study at M.I.T. as Sloan Fellows, 216
Instruments: in orbital rockets to obtain space data, 93; telescope at University of California, 96
Insulation, vermiculite provides thermal and electrical, 219
Inventions, of Twentieth Century, 176
Insulin, chemical test for presence of, 108
Interfraternity Conference, M.I.T., National Interfraternity Conference trophy awarded to, 98
Inventions, in printing industry, 507
Iron: body assimilation of, 143; self-diffusion in, 496
Iron ore, duration of reserve of, 158

J

Jackson, Charles O., assistant, M.I.T. student Placement, 211
Jackson, Dugald C., M.I.T. room named for, 522
Jackson Room, dedication of, 522
James, Robert G., becomes instructor, 102
Jewett, Frank B.: obituary, 213; resolution on, read, 262; photo, 213
Joffe, Julian A., on gossip, 88
Johnson, Arthur E., becomes assistant professor, 382
Johnson, John C., becomes assistant professor, 382
Jones, Thomas F., Jr., becomes assistant professor, 102; develops flight simulator, 213
Jope, Ralph T., speaks before M.I.T. Alumni Council, 108
Judgment, development of, 500
Just, Evan, on minerals and metals, 158

K

Kane, Henry B.: reports to Alumni Council, 160, 379; chairman, Staff Comm. for Open House, 160; designed stein, 520
Kelly, Burnham, becomes associate professor, 382
Kelly, Fred C., on Montgomery's gliding experiments, 92
Kendall, Delvin E., Jr., becomes instructor, 102
Kepes, Gyorgy, designs award-winning brochure, 218
Kern, Albert G., Jr., nominated representative, National Nominating Comm., 262
Keyes, Frederick G.: retires from M.I.T., 319; photo, 319
Khan, Liaquat Ali, visits M.I.T., 522
Killian, James R., Jr.: Parts I and II of annual report of, 33, 98; addresses Class of 1953, 35; announces plans for Lowell Textile and M.I.T., 36; speaks before M.I.T. Alumni Council, 108, 318; first elected treasurer, Alumni Association, 249; announces Dorrance Laboratory, 260; speaks at alumni midwinter meeting, 263; participant, Hayden Library dedication, 425; on duties of colleges during armed truce, 429; on living the American credo, 503; receives doctor of laws degree, 480; delivers Alumni Day banquet address, 520; photos, 100, 493, 514, 517, 519, 521
Kimball, Robert M.: executive assistant to M.I.T. President, 379; photo, 379
Kimball, William A., early organizer, M.I.T. Alumni Association, 248
Kispert, Malcolm G., speaks before M.I.T. Alumni Council, 160
Knowledge, of commonplace not trivial, 500
Kochenburger, Ralph J., becomes instructor, 102
Koehl, Robert L., becomes instructor, 102
Koppen, Otto C., speaks before M.I.T. Alumni Council, 262
Kraushaar, William L., research by, on mesons, 426, 495
Krystyan, Karol J., becomes instructor, 102
Kusko, Alexander, becomes assistant professor, 382

L

Labor, strikes by, 258
Lahey Clinic, radiologists from, treat cancer patients at M.I.T., 384
Land camera, demonstrated before M.I.T. Alumni Council, 161
Landrock, Arthur H., and Proctor direct Packaging Research Laboratory at M.I.T., 87
Latham, Allen, Jr.: Alumni Day deputy chairman and banquet chairman, 106, 263, 379; becomes vice-president, M.I.T. Alumni Association, 262, 444
Lavedan, Pierre F.: becomes alumni term member, M.I.T. Corporation, 262, 444; photo, 262
Lead, duration of reserve of, 158
Leg braces, research on, 496
Leeper, Charles K., becomes instructor, 102
Lees, Sidney, becomes assistant professor, 382
Letters to the Editor: does Review accept articles from Alumni? 78; on error in Batterman's photo, 354; on error in Bunker article, 78; on "Gloucester Fisherman," 296, 420; on international cooperation, 296; on Philadelphia Centennial, 12; on therapeutic agents, 12; on Twentieth Century, 190, 240; praise for Review articles, 354, 420; praise for Review photos, 190
Lewis, Warren K., speaks before M.I.T. Alumni Council, 380
Ley, Willy: on rockets, 93; on seadromes, 207
Li, Yao T., and Draper develop engine indicator, 164
Library, *see* Charles Hayden Memorial Library
Library Lounge, description of, 368
Lick Observatory, 120-inch telescope at, 96
Life, copy presentation methods of, 511
Light, commensurator for study of, 426
Lineham, Thomas U., Jr.: becomes professor, 101; photo, 102
Linsley, Duncan R., reports on Development Fund, 446
Lithomat Corporation, developed photocomposition process, 18
Little, Arthur Dehon, Memorial Lectures, Detlev W. Bronk delivers fourth, 164
Livingston, Larry F., demonstrates duPont products, 263
Lobdell, H. E.: on trains, 149; on M.I.T. Alumni Association, 247; speaks before Honorary Secretaries, 518
Locomotion, human, mechanism of, studied, 496
Locomotives, *see* trains
Loomis, Alfred L., photo, 21
Loomis, Henry, becomes asst. secretary, M.I.T. Corporation, 213
Lougheed, Victor, records Montgomery's gliding experiments, 92
Lowell, Ralph: becomes term member, M.I.T. Corporation, 99; at Lowell Institute graduation, 446; photo, 99
Lowell Institute School, holds graduation exercises, 446
Lowell Textile Institute, and M.I.T. to pool resources, 36
Lunn, John A., becomes president, M.I.T. Alumni Association, 261, 444; photos, 261, 518
Lustwerk, Ferdinand, research by, on diffuser, 303

M

McAdams, William H., received Walker Award, 214
McClintic, Howard H., Jr., reports on Development Fund, 446
McClintock, Frank A., becomes assistant professor, 102
McCormick, Madeline R., becomes asst. treasurer, M.I.T. Alumni Association, 160
McCrary, Samuel E., biographical sketch of Faraday by, 23
McCurdy, H. W., reports on Development Fund, 446
McGowan, James, Jr., Pres., Campbell Soup Co. which makes grant to M.I.T., 260
MacGregor, Charles W., research by, on metals, 301
Machinery, wave correlator to detect vibration and noise of, 84
Maclaurin, W. Rupert, speaks before M.I.T. Alumni Council, 380
MacMillan, John H., receives Class of 1948 award, 516
McMillin, James B., President, Rowing Coaches Organization of America, 218
Maloney, Daniel J., piloted Montgomery glider, 110
Man: gossip as social control of, 88; educational problems of, 304; reading done by, 511
Management and labor, relationship between, in strike settlement, 272
Manganese, use of, in steel, 159
Mann, Robert W.: in Class Day exercises, 515; informal photos, 515, 516
Manu Kai, short description of, 202
Map Room, M.I.T., description of, 366
Markham, John R., becomes director, M.I.T. Naval Supersonic Laboratory, 211
Mason, Edward A.: becomes instructor, 102; becomes assistant professor, 382
Mass production: involves integration of specialists' work, 305; in ceramics industry, 307
Massachusetts General Hospital: conducts research on cancer, leg braces, 245, 496; radiologists from, treat cancer patients at M.I.T., 384
Massachusetts Institute of Technology: activities at, 108, 263, 520; and Lowell Textile pool resources, 36; architectural acoustics studied at, 146; athletics at, 315; conducts research on the following: adhesives, 303; atoms, 495; beet sugar waste, 141; commensurator, 426; diffusers, 303; edestin crystals, 202; engines, 142, 164, 302; flight simulator, 212; foods, 428; gas densities and properties, 144; hydroelectricity, 199; insulin, 108; iron in body, 143; iron, self-diffused, 496; leg braces, 496; mesons, 495; metals, 301, 360; microwave radar, 197; synthesis of peptides, 198; ultrasonics, 427; voltage breakdown, 302. duties of, during cold war, 429; early days of, 247; enrollment at, 174; Faculty promotions and retirements, 101, 382, 319; gifts to, from Classes of 1925, 1900, 520; Graduate School, 26; graduate study in ceramics at, 307; grants to, 211, 260; Great Court, animal and plant life in, 442; Hayden

Library dedicated, 361; Open House at, 322; Riverside Hotel purchased by, 322; Rockefeller gift to, 446; scholarship at, 318; staff promotions, 101, 382; summer courses at, 381; synchrotron tests at, 268; treasurer's report, 101; Westinghouse fellowships at, 264; wind tunnel dedicated at, 161
Meadows, Paul, on labor strikes, 257
Mechanical Engineering, Department of, to hold forum on Alumni Day, 444
Medicine: insulin test, 108; cancer diagnosis, 245; cancer treatment, 384; radiation defense courses, 390; research on leg braces, 496
Meissner, Herman P., and Dietz direct research on adhesives, 303
Meson: Yukawa predicts discovery of, 177; artificial production of, 268; measurement and lifetime of, 426, 495
Metal Processing Laboratory, M.I.T., conducts research on metals, 360
Metallurgy, science of, prevents mineral depletion, 158
Metallurgy, Department of, research by, on self-diffusion in iron, 496
Metals: effect of meteorites on, 19; consumption and supply of, 158; fatigue of, 301; surface-tension forces of, 360
Meteorites, impact of, on space ships, 19
Meteorology, research in, includes development of microwave radar, 198
Meteorology, Department of, research by, on microwave radar, 197
Michelson interferometer, used in spectroscopic studies, 426
Military Science and Tactics, Department of, *see* Visiting Committee reports
Millikan, Max F., becomes associate professor, 102
Minerals: consumption and supply of, 158; description and uses of vermiculite, 202
Minorsky, Nicholas, ship-roll stabilization system of, 441
Models, used to predict auditorium's acoustics, 146
Molecules, electron microscope visualizes edestin protein, 202
Montagu, M. F. Ashley: on better family living, 30; on world government, 205
Montgomery, John J., gliding experiments of, 92
Moreland, Edward L.: read resolutions on Jewett, 262; retires from M.I.T., 319; photo, 319
Morris, Frederick K.: retires from M.I.T., 319; photo, 319
Mosquito bomber, laminated materials in, 254
Motora, Shintaro, ship-roll stabilization system of, 441
Moyroud, Louis M., and Higonnet, inventors, photocomposition process, 18
Munoz, Ramon F., nominated representative, National Nominating Committee, 262
Munroe effect, description and applications of, 52
Munsell, Hazel, research by, on indigenous foods, 428
Music Lounge, M.I.T., description of, 365

N

National Bureau of Standards: research by, on electron tubes, 22; standardizes time and frequency by radio signals, 220
Natural resources: use of chemically transformed, 22; depletion of, 158
Naval Architecture and Marine Engineering, Department of, *see* Visiting Committee reports
Naval Supersonic Laboratory, M.I.T., dedication and description of wind tunnel, 161
Nehru, Prime Minister of India, photo, 100
Nelson, George L., becomes assistant professor, 382
Nelson award, presented to Dr. Compton, 164
Neumann, Ernest P.: research by, on wind tunnel diffuser, 303; becomes associate professor, 382
Neutron, Rutherford predicted existence of, 177
New Dormitory, formerly called Senior House, completed, 98
Newman, Robert B.: becomes instructor, 102; research by, on architectural acoustics, 146
Newmann effect, description and applications of, 52
Nohel, John A., becomes instructor, 384
Noise, of machinery; use of wave correlator to detect, 84
Norton, Frederick H., on applications of science to ceramics industry, 307
Norton, Dr. Paul, member, Committee on Brace Research, 496
Nuclear physics, today's dominating science, 176
Nuclear Science and Engineering Laboratory, M.I.T., completes synchrotron tests, 268, 342; mesons studied in, 426, 495
Nutrition: chemically transformed raw materials as factor in, 22; bodily assimilation of iron as experiment in, 143; indigenous foods provide, 428; from foods depends on soil fertility, 432
Nutritional Biochemistry Laboratories, M.I.T., research by, on nutritive value of indigenous foods, 428

O

Office of Naval Research, sponsors research on ultrasonics, mesons, 426, 495
O'Grady, Charles H., becomes instructor, 384
Olton, Roy, becomes instructor, 102
Open House: Champ to be student chairman of, 160; Kane to be staff chairman of, 160; date of, 322

P

Packaging materials, for foods, 86
Packaging Research Laboratory, M.I.T., conducts research on packaging materials for foods, 87
Palmer, Elbridge W.: Alumni Day symposium speaker, 444, 519; on needs of the graphic arts industry, 506; informal photo, 514
Palomar telescope, glass disk from, becomes another telescope, 96
Pandit, Mrs. Vijaya Lakshmi, photo, 100
Patch, Claude E., on systems of maintenance and repair of airplanes, 85
Paynter, Henry M., Jr., research by, on hydroelectric systems, 199
Peace, world: world government could provide, 206; union of democracies to provide, 437
Pearson, Erman A., developed reclaiming process for beet-sugar waste, 141
Peptides, preparation of, by synthesis, 198
Perlman, Alfred E., nominated representative, National Nominating Committee, 262
Perry, J. Whitney, becomes associate professor, 102
Petroleum, duration of reserve of, 158
Phelps Dodge Corp., grant from, to M.I.T., 211
Philosophy, necessity for acquirement of, 503
Photocomposition, printing process, description of, 17
Photographs:
Airplanes: being serviced, 85; stratojet, ascending, 204; three, against cloud background, December cover
Animals: horses grazing, 433; horses plowing, 428; three geese, 424; woodcock's broken leg, 443
Apparatus: electrical control room, 145; at M.I.T. supersonic wind tunnel, 161; Weston's chemical laboratory, 371
Boats: at dock, 259; deck awash, 441; funnel on, 439; in locks, 357; small, on shoreline, 438; through bridge arch, 423
Bridges: Lehigh River, February cover
Buildings: Capitol, 200; house, 438; houses, prefabricated, 253, 256; industrial building, 256; log cabin, 81; New York skyline, 437; silos, 434
Electronics: television set being observed, 511
Instruments: computer corrector, 427; flight simulator, 212; images on radar scope, 198; in Weston's Laboratory, 370; magnetron, 21; Weston's ammeter, 372; wind tunnel diffuser, 303
Massachusetts Institute of Technology: Buildings from Charles River, 377; dinghies, 35; Graduate House, 29; Great Court, 375; Hayden Library, May cover, 363, 364, 365, 366-368; pylon of building, April cover; Rogers Building, 15; November cover, 431
Miscellaneous: adding machines, 498; automobile, 505; balloons, 299; building materials, 254, 255; building construction, 255; crucibles, 311; crystals, 308; derrick, 243; dinner plates, 308, 309; engines, 142; gas discharge model, 302; Kensico Dam, 358; lightning, 16; Linotype machine, 509; locomotives, January cover, 139, 149, 150, 154, 155; lumber, 196; machinery, excavating, 307; oil refinery, 257; organ keyboard, 499; precision tools, 144; refractories, 311; refractory brick, 310; rocket, 250; rope, 195; sand dunes, June cover; spark-plug porcelains, 310; stacks, six, 201; steel at blast furnace, 140; tapping a heat, March cover; tennis racket, 214; typesetting, 494; typewriters, July cover; violin, 501; Weston's dynamo, 370
People: Alumni Day speakers, 514; at Alumni Day, 515, 517, 519; at Alumni Day banquet, 493, 518; children and locomotive, 139; Class Day participants, 516; Class of 1890, 516; Class of 1899, 38; Class of 1900, 516, 519; Class of 1902, 515; Class of 1916, 516; commencement speakers, 514; Crew, 524; man telephoning, 90; men chatting, 89; monk, 82; shelving books, 162; woman telephoning, 91; women graduates, 517
Scenes: country road, 251; hayload on country road, 435; in Vermont, 31
Photography: used in new printing process, 17; flashlight, 161; x-ray, to see atomic structure of crystals, 495
Physics, papers presented before American Physical Society meeting, 268
Physics, Department of, research by, on body assimilation of iron, 143
Pictures, as means of communication, 540
Pigford, Thomas H.: becomes assistant professor; director, Oak Ridge Eng. Practice School, 211
Piston rings, plated with radioactive chromium, 302
Pitré, Thomas P., speaks before Honorary Secretaries' meeting, 518
Pitré, Mrs. Thomas P., Alumni Day Ladies' Events chairman, 263, 379
Placement Office, M.I.T., moves to Building One, 104
Plant life, in M.I.T.'s Great Court, 442

Plants, single-celled, use of, in biological research, 425
Plywood, used in building construction, 255
Politics, requires hardihood to practice, 148
Pollution, water, reduction of, 141
Polychrone, Demitrios A., becomes assistant professor, 382
Pomona College, combines liberal arts and technological study, 35
Population: growth of U.S., 156; implications of over-, 306
Porter, John L., becomes representative, National Nominating Committee, 262, 444
Pottery, production methods of, 309
President's report, 33, 98
Price, Richard P.: Class Day speaker, 515; presents Class gift, 520; informal photos, 516, 520
Printing: new photocomposition process for, 17; M.I.T. School of Architecture receives award for, 218; history and development of, 506; effect of communication mediums on, 511; application of technology to, 512
Proctor, Bernard E., and Landrock direct Packaging Res. Lab. at M.I.T., 87

R

Radar, microwave, development of, 197
Radiation, defense, courses in, sponsored, 390
Radio, standardization of time and frequency signals in field of, 220
Radioactivity, techniques of, used to study body assimilation of iron, 143
Rae, John B., on a union of the democracies, 437
Railroads, train speeds and mileages, 149
Raindrops, instrument to measure size of, 198
Ramie, description and uses of, 145
Rau, John M., Jr.: receives three M.I.T. degrees, 517; photo, 517
Reading, effect of communication mediums on, 510
Religion, spiritual unity of Americans, 504
Research: importance of, to security, 430; on adhesives, 303; on architectural-acoustics, 146; on atomic particles, 268; on beet-sugar waste, 141; on cancer, 384; on commensurator, 426; on electron tubes, 22; on engines, 142, 164, 302; on food-packaging materials, 86; on foods, 428; on gas densities and properties, 144; on hydroelectric systems, 199; on iron, 143, 496; on leg braces, 496; on mesons, 495; on metals, 301, 360; on microwave radar, 197; on photographing atomic structures in crystals, 495; on protein edestin, 202; on synthesis of peptides, 199; on ultrasonics, 427; on voltage breakdown, 302; on wind tunnel diffuser, 303; place of, in graduate training, 29; required for progress in graphic arts, 512; sponsored by industrial grants-in-aid, 211
Research Corp. of N. Y., M.I.T. conducts research for, 199
Research Laboratory of Electronics, M.I.T., research by, on voltage breakdown, 302
Reswick, James B.: becomes instructor, 102; becomes assistant professor, 382
Reynolds, James E., becomes instructor, 102
Rheinbote, three-step rocket, 112
Richards, Robert H.: participated in founding M.I.T. Alumni Association, 248; photo, 249
Richmond, H. B., speaks before M.I.T. Alumni Council, 106
Ritchie, William E., becomes assistant professor, 382
Riverside Apartment Hotel, purchased by M.I.T., 322, 526
Roberts, John D., becomes associate professor, 382
Robnett, Ronald H., speaks before meeting of Honorary Secretaries, 518
Robot: subject of play, *R.U.R.;* Wiener demonstrates, 390
Rochow, Eugene G., suggests use of chemically transformed raw materials, 22
Rockefeller, John D., Jr., gift from, to M.I.T., 446
Rockets: experiments on liquid-fuel, 20; three-step, 93, 112; early and modern, 203; in future wars, 250
Rodriguez, Antonio H., nominated representative, National Nominating Comm., 262
Ross, Richard C., becomes instructor, 102
Rossi, Bruno B., member, National Academy of Sciences, 521
Rule, John T.: chairman, Course in General Science and General Engineering, 380; photo, 380
Rupp, Norman N., nominated representative, National Nominating Comm., 262
R.U.R., M.I.T. Dramashop play presented, 388
Russell, George E.: Class Day speaker, 515; informal photos, 516, 517, 518
Russert, Walter R. C., becomes representative, National Nominating Committee, 262, 444
Russia, as dictatorship, cannot compete with democracy in advancing science, 147
Rutherford, predicted existence of neutron, 177

S

St. George, Emery, Jr., aided development of flight simulator, 213
Salem, Raphael; becomes professor, 382; photo, 382
Satisfactions, obtained by unselfish objectives, 497
Sawyer, C. Adrian, Jr.: becomes alumni term member, M.I.T. Corporation, 262, 444; presided, Alumni Day banquet, 520; photos, 262, 493, 514, 515, 516, 518
Sawyer, Clair N.: supervised reclaiming process for beet-sugar waste, 141; becomes professor, 382; photo, 382
Scholarship: records of M.I.T. students, 318; statistics on, at M.I.T., 520
Schwarz, Edward R., approves co-operative plan for Lowell Textile and M.I.T., 36
Science: and humanities fused, broaden education, 33; accomplishments of, 156; applications of, to ceramics industry, 307; does not thrive on secrecy, 431
Science teachers, Westinghouse fellowships available to, 264
Sciences, success of industrial democracy depends on unity between natural and social, 166
Scott, Ronald E., becomes instructor, 384
Sea Spider, catamaran built by Herreshoff, 201
Seadromes, description of proposed, 207
Sears, Francis W., chairman, Summer Program for Science Teachers Committee, 264
Seasickness, stabilized ships prevent, 439
Security: attributes of, to maintain a democracy, 148; modern warfare instruments provide reasons for maintenance of, 203; rocket as instrument of world, 278; man's methods of obtaining, 336
Selfridge, Samuel W., report from, on Development Fund, 446
Senior House, *see* New Dormitory
Sennet, Stewart W., becomes instructor, 384
Servomechanisms: flight simulator developed, 212; Campbell speaks on, 445
Shanklin, Dunbar L., Alumni Day deputy chairman, 263, 379
Sheehan, John C., research by, on synthesis of peptides, 198
Sherman, Henry, becomes assistant professor, 382
Sherry, William J., reports on Development Fund, 446
Sherwood, Thomas K.: received Walker Award, 216; speaks before M.I.T. Alumni Council, 380
Shipman, Charles W., becomes instructor, 102
Ships, roll-preventive methods for, 439
Shrock, Robert R.: becomes professor, acting in charge Dept. of Geology, 101; becomes head, Dept. of Geology, 381; photos, 102, 381
Silberstein, Morton S., becomes assistant professor, 382
Sillcox, Lewis K., speaks at Lowell Institute graduation, 446
Singleton, Henry E., becomes instructor, 384
Sinizer, David I., becomes assistant professor, 382
Similitude, laws of, application of, 142
Skills, development of, for successful living, 500
Skofield, Herman T., becomes instructor, 102
Sloan, Alfred P., Jr., Dr. Killian pays tribute to, 526
Sloan Fellowships, provide for study at M.I.T., 216
Sloan Laboratories for Aircraft and Automotive Engines: research in, on engines, 142, 302; engine indicator developed in, 164
Sloan Metal Processing Laboratory, to be constructed at M.I.T., 526
Smith, Charles E.: presents Class gift, 520; informal photos, 518, 520
Smith, Charles O., becomes assistant professor, 382
Smith, George Warren, member, Executive Committee, Alumni Association, 262, 444
Smith, Paul E., Jr., becomes instructor, 384
Smith, A. O., Corporation, grants research fund to M.I.T., 211
Snyder, Joseph J.: Treasurer's report summarized, 101; becomes treasurer, 378; photo, 378
Socialism, suppresses individual, 373
Sociology: application of Christian principles as factor in, 30; gossip as a social control, 88
Socony-Vacuum Laboratories, grants research fund to M.I.T., 211
Soil, fertility of, provides nutrition, 432
Solow, Robert, becomes assistant professor, 102
Sons of Alumni, list of, in Freshman Class, 99
Space ships, effect of meteorites on, 19
Spectroscopy, commensurator developed at M.I.T., 426
Sperry, Elmer A., gyroscope patent of, 454
Stabilization, methods of, for ships, 439
Staff, M.I.T.: promotions, 101, 384; age groups of, 319
Standard Oil Co. of Calif., grants research fund to M.I.T., 211
Standardization, of time and frequency by radio signals, 220
Station WWV, broadcasts standard time and frequency signals, 220
Statistics: for U.S., 157; on labor strikes, 257
Steel, tested for fatigue failure, 301
"Stein Song, A," history of, 246
Stevens, Raymond, reports on Development Fund, 446
Stewart, William L., Jr., report from, on Development Fund, 446
Stoft, Paul E., becomes instructor, 384
Stratton, Julius A.: becomes provost, 98; Alumni Day morning program chairman, 263, 379; speaks before M.I.T. Alumni Council, 380; speaks at Lowell Institute graduation, 446; member, National Academy of Sciences, 521
Streeton, Jack W., becomes associate professor, 102

Strikes, labor, statistics on; solutions of, 257
Student Activity, Committee on, *see* Visiting Committee reports
Student-Faculty Committee, sponsors lectures on techniques of teaching, 98
Student life, M.I.T., survey on, 98
Students, M.I.T.: conduct study on architectural acoustics, 146; admission problems of foreign, 263; placement of, favorable, 521
Stutt, Charles A., becomes instructor, 384
Sugar, yield of, from beets, increased, 141
Summer Session, M.I.T.: Gale becomes director of, 35, 36; courses, 381; Gale speaks on, 445
Synchrotron, M.I.T., operating tests completed, 268, 342; mesons studied in, 426, 495
Synthesis, new, in preparation of peptides, 198

T

Tallman, Gerald B., directs Sloan Fellowship program, 218
Tate, Vernon D.: and coauthor Burchard on Hayden Library, 361; participates in Hayden dedication, 425
Taylor, C. Fayette, research by, on engines, 142, 164
Teaching, benefits from Westinghouse fellowships, 264
Tech Block, purchased by M.I.T., 35
Technology, application of, to graphic arts industry, 512
Technology, industrial, accomplishments in, 156
Technology Loan Fund, report on, 99
Technology Review, The, moves to Building One, 104
Tech's-a-Poppin, report on, 171
Telescopes, description of Univ. of California's, 96
Television, effect of, on reading, 552
Temperature, data on, from orbital rocket instruments, 93
Testing Materials Laboratory, M.I.T., research by, on fatigue of metals, 301
Textile technology, Lowell Textile and M.I.T. to pool resources for studies in, 36
Textiles, description and uses of ramie, 145
Thomas, Charles A.: becomes alumni term member, M.I.T. Corporation, 262, 444; photo, 262
Thomas, George B., Jr.: becomes executive officer, Department of Mathematics, 211, 382; becomes associate professor, 382
Thomas, J. Earl, Jr., research by, on mesons, 426
Thresher, B. Alden, speaks before Honorary Secretaries' meeting, 517
Tin, as catalyst to convert coal into gasoline, 87
Titanium Alloy Mfg. Div., sponsors research at M.I.T. on iron, 496
Tizard, Sir Henry, photo, 21
Tompson, George M., resolutions on, adopted, 106
Totalitarianism: union of democracies as preventive of, 462; knowledge of democracy is weapon against, 503
Towle, Warren L., becomes assistant professor, 102
Trains, survey of speeds and mileages of, 149
Transportation: increased train speeds and mileages improve, 149; changes in, 174; affects world political conditions, 306
Treasurer's report, M.I.T., summarized, 101
Truman, President Harry S.: accepts Dr. Compton's resignation, 83; appoints Hunsaker to serve on National Advisory Comm. for Aeronautics, 214
Trump, John G., improves cancer treatment, 384
Tswett, Michael, discovered chromatography, 20
Tubes, electron, research on, 22
Tucker, Donald S.: retires from M.I.T., 319; photo, 319
Tuition, M.I.T., cost of, 101
Twentieth Century, accomplishments of, 176

U

Udin, Harry: becomes assistant professor, 102; research by, on metals, 360
Ultrasonics, generator for study of, 427
Unions, labor, strikes by, 270
United Fruit Company, grant from, to M.I.T., 211
United Nations: proposals for charter of, 206; last hope of mankind, 278; provides restraining influence, 437
United States: as a democracy, can outpace dictatorship, 148; statistics for, 157
United States Army, Ordnance Dept. sponsors research at M.I.T., 303
United States Bureau of Mines, uses tin as catalyst in converting coal into gasoline, 87
United States Navy, Bureau of Ordnance: constructs supersonic wind tunnel at M.I.T., 161; flight simulator developed at M.I.T. under auspices of, 212
United States Public Health Service, studies reclaiming process for beet-sugar waste, 141

V

V–2 rocket; and *WAC Corporal* tested, 20; description of, 95
Vallee, Bert L., and Fawcett develop technique for cancer diagnosis, 245
Van Os, John H., becomes instructor, 102
Venturi, description of, 200
Vermiculite, description and uses of, 202
Vibration: of machinery; use of wave correlator in detecting, 84
Visiting Committee reports: Architecture, 42; Military Science and Tactics, 38; Naval Architecture and Marine Engineering, 44; Student Activity, 48

W

WAC Corporal rocket; and *V–2* tested, 20; fired, 112
Wadsworth, George P., member, Summer Program for Science Teachers Committee, 264
Walcott, Fredman J., Jr., becomes instructor, 384
Walker, Ralph T., participates in Hayden Library dedication, 425
Walker, William H., Award, recipients of, 214
War: appraisal of modern instruments of, 203; atom bomb will not prevent, 205; rockets and atomic bombs in next; defense against is political question, 250; aircraft defense to warn of, 312; does not destroy civilization, 373; duties of colleges in cold, 429; union of democracies to prevent, 437
Wasserman, Arthur A.: Class Day participant, 515; photo, 515
Water: pollution reduction of, 141; supplies and power improved by hydroelectric systems, 199
Waugh, David F., developed chemical test for insulin, 108
Wave correlator, used to detect machinery vibration, 84
Weather, microwave radar developed to study, 197
Webb, Thomas H., located vermiculite sample in 1824, 202
Webster, Edwin S.: obituary, 523; photo, 523
Wells, Webster, early organizer, M.I.T. Alumni Association, 248
Wesleyan University, combines liberal arts and technological study program, 35
Westervelt, Peter J., research by, on ultrasonic generator, 427
Westinghouse Educational Foundation, provides fellowships for science teachers, 264
Weston, Edward: biographical sketch of, 369; photo, 369
Whitaker, Channing, first vice-president, M.I.T. Alumni Association, 282
Whitcomb, Emmons J., Alumni Day transportation chairman, 263, 379
White Sands Proving Ground, rocket experiments at, 20, 95
Whitman, Walter G., speaks before Honorary Secretaries' meeting, 519
Wiener, Norbert: presents prologue to *R.U.R.*; demonstrates robot, 390
Wiesner, Jerome B.: becomes professor, 382; photo, 382
Wilbur, John B., speaks before M.I.T. Alumni Council, 319
Wild life, in M.I.T.'s Great Court, 442
Williams, M. H.: on instruments of warfare; particularly the rocket, 203; on use of rockets and atomic bombs in future war; question of defense is political, 250
Wilson, William A., becomes associate professor, 102
Wind tunnel, supersonic: diffusers for, 303; *see also* Naval Supersonic Laboratory, 303
Wong, James, becomes instructor, 102
Wood, Gar, description of *Venturi*, constructed by, 200
Woodbury, David O.: on Univ. of California's 120-inch telescope, 96; biographical sketch of Edward Weston by, 369
World government: suggestions for establishment of, 206; union of democracies should precede, 437
World War II, laminated materials used during, 253
World War II Memorial, for M.I.T. Alumni, 379
Wright, C. Conrad, becomes assistant professor, 382
Wright brothers, believed Montgomery's glider of incorrect design, 110
Wurster, William W., resigns from M.I.T., 211

X

X-rays, to photograph atomic structures in crystals, 495

Y

Yates, H. G., describes use of wave correlator, 84
Yukawa, Hideki, predicted particle known as meson, 177

Z

Zacharias, Jerrold R., director, Nuclear Science and Eng. Laboratory, M.I.T., 268
Zallen, Joseph, research by, on ultrasonic generator, 427
Zimmerman, George L., becomes instructor, 102
Zinc, duration of reserve of, 158